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AUTHORS: (8) Vyshnevs'kyi, V. N., Lyskovych, O. B., Pidasyraylo, M. S.
and Chornyy, Z. P.

TITLE: (6) Investigation of x ray luminescence of scintillators
NaI (Tl)

PERIODICAL: (15) Ukrayins'kyi fizychnyy zhurnal, v. 7: 10, 1962.

pp. 1101-1104

TEXT: Single crystals of NaI(Tl), 2 - 3 cm thick and having a cross-section area of 2 cm², were investigated. The energy distribution graph shows a broad intense band with a maximum near 420 mu and a less intense one near 330 mu. If the activator concentration is smaller than 2.5×10^{-4} moles Tl/mole NaI the total intensity of luminescence is proportional to it. Continuous irradiation for 17 hours decreased the luminescence intensity, which did not return to usual value after 30 hours. The authors explain this by additional scattering of the excitation energy on lattice defects caused irreversibly by irradiation. The authors thank Ya. M. Zakharko for

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Investigation of x ray ...

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discussion. There are 3 figures.

ASSOCIATION: L'vivs'kyi derzhuniversytet im. Iv. Franka (L'viv State University im. Iv. Franko)

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